Special Issue

Additive Manufacturing Technologies for Sustainable Digital Construction

Message from the Guest Editors

The construction industry plays an important role in addressing global challenges regarding climate protection and limited resources. This will push future demand for materials and energy. In this context, additive manufacturing is of particular importance, as it enables the application of novel design principles and the intelligent and efficient use of materials and resources. Thus, the implementation of additive manufacturing in construction could significantly reduce material usage and help to transform the building industry into sustainable digital construction.

This Special Issue aims to provide a forum for the discussion of additive manufacturing technologies. The aim is to facilitate a cross-material and cross-process discussion that takes into account aspects of materials science, process engineering, structural design, process control, construction site processes, and large-scale applications in practice. Furthermore, innovative ideas and strategies for the digital control of planning, construction, and operation of buildings through artificial intelligence or machine learning for sustainable digital construction are also welcome.

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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